UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,612	05/01/2006	Timothy George Bissett	UDL-174	3548
36822 7590 09/27/2010 GORDON & JACOBSON, P.C. 60 LONG RIDGE ROAD			EXAMINER	
			CAHN, DANIEL P	
SUITE 407 STAMFORD, CT 06902			ART UNIT	PAPER NUMBER
			3634	
			MAIL DATE	DELIVERY MODE
			09/27/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/595,612	BISSETT, TIMOTHY GEORGE			
Office Action Summary	Examiner	Art Unit			
	DANIEL CAHN	3634			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONEI	L. viely filed the mailing date of this communication. O (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>17 S</u>	eptember 2010.				
2a) This action is FINAL . 2b) ☐ This	s action is non-final.				
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 16-31 is/are pending in the applicatio 4a) Of the above claim(s) 18 is/are withdrawn f 5) Claim(s) is/are allowed. 6) Claim(s) 16,17 and 19-31 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	from consideration.				
Application Papers					
9)☑ The specification is objected to by the Examine 10)☑ The drawing(s) filed on <u>01 May 2006</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	□ accepted or b) ☑ objected to be drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application Other:					

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

The request filed on 07/01/2010 for a Request for Continuing Examination (RCE) under 37 CFR 1.114 is acceptable and an RCE has been established. Any previous finality is hereby withdrawn and a new action on the merits follows. Any newly-submitted claims have been added. An action on the RCE follows.

Election/Restrictions

Applicant's election without traverse of Group II which include claims 1-17 and 19-31 in the reply filed on 09/17/2010 is acknowledged. Claim 18 has been withdrawn and the Election has been made Final.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 'plastically deformable wound coil element' in Claim 31 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: the specification does not describe in what manner the cable and 'shock absorbing means' (spring or the like) are connected so as to provide a tension to the cable.

Appropriate correction is required.

Claim Objections

Claim 25 is objected to because of the following informalities: Claim 25 depends on itself, claim 25.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16, 28 and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not describe in what manner the cable and 'shock absorbing means' (spring or the like) are connected so as to provide a tension to the cable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16, 17 and 19-31 are. rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 16, 17, 23, 28 and 31, the phrase "controls the shock load applied to..." is unclear due to the term 'control'. How would a shock absorbing device control something exactly? Maybe a term more akin to dampen or restrain is more appropriate. Is there another way in which it meant to control the load other than through dampening or the like?

Regarding claim 23, this claim is unclear since it claims a third energy absorbing means (line 2) without having yet claimed a 2^{nd} energy absorbing means. Where's the 2^{nd} means?

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16, 17, 19-23 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell (US 5316102); or in the alternative under 35 U.S.C. 103(a) as being unpatentable over Bell '102.

Regarding claims 16, 17 and 28, Bell teaches:

A fall arrest system (depicted in Fig. 1) for use with a fall arrest device, the fall arrest system comprising:

an upper anchor point (22A except for the D-rings 48; Fig. 1) secured in a fixed position;

a first energy absorbing means (D-ring; 48A) coupled to said upper anchor point (examiner notes that the definition of the term 'absorb' has been provided below, and that any element which takes in, endures, or consumes energy can be reasonably interpreted as an 'energy absorbing means');

Application/Control Number: 10/595,612

Art Unit: 3634

a lower anchor point (22B except for the D rings 48; Fig. 1) secured in a fixed position vertically below said upper anchor point and said first energy absorbing means; and

a cable (24; fig. 1) extending vertically between said first energy absorbing means and said lower anchor point, wherein said upper anchor point and said lower anchor point exert opposed tensile forces that are imparted on said cable extending between said first energy absorbing means and said lower anchor point such that said cable is pre-tensioned (examiner notes that the anchor points can be adjusted in height and therefor inherently provide the ability to pretension the cable depending on far apart they are anchored from each other); and

'a second energy absorbing means from claim 28' (the D-ring 28 connected to 22B; see Fig. 1) coupled to and operably disposed adjacent said lower anchor point and connected to said cable,

'a second energy absorbing means from claim 17' (26, 30, 80; Fig. 1) configured to couple [capable of coupling] to the fall arrest device (such as a harness 34) and control a load applied to a user during said fall arrest event.

wherein said first energy absorbing means and said second energy absorbing means are connected to said cable and control (or direct, regulate, operate, etc.; the D-ring control a shock since they direct the shock towards the anchors) a shock load applied to said upper anchor point resulting from forces applied by the fall arrest device to said cable during a fall arrest event.

Art Unit: 3634

However, if it is found that the cable is not pre-tensioned, the examiner takes

Official Notice that pre-tensioning a cable had been well known in the art at the time of
the invention (as discussed in the applicants specification) in order to ensure that cable
does not extend too far during a fall so that the user doesn't run the risk of extending too
close to objects below his falling point.

ab·sorb

tr.v. ab·sorbed, ab·sorb·ing, ab·sorbs

- 1. To take (something) in through or as through pores or interstices.
- 2. To occupy the full attention, interest, or time of; engross. See Synonyms at monopolize.
- 3. To retain (radiation or sound, for example) wholly, without reflection or transmission.
- 4. To take in; assimilate: immigrants who were absorbed into the social mainstream.
- **5.** To learn; acquire: "Matisse absorbed the lesson and added to it a new language of color" (Peter Plagen).
- **6.** To receive (an impulse) without echo or recoil: a fabric that absorbs sound; a bumper that absorbs impact.
- 7. To assume or pay for (a cost or costs).
- 8. To endure; accommodate: couldn't absorb the additional hardships.
- 9. To use up; consume: The project has absorbed all of our department's resources.

The American Heritage® Dictionary of the English Language, Fourth Edition copyright ©2000 by Houghton Mifflin Company. Updated in 2009. Published by <u>Houghton Mifflin Company</u>. All rights reserved.

con-trol

-verb (used with object)

1. to exercise restraint or direction over; dominate; command.

Dictionary.com Unabridged. Retrieved September 22, 2010, from Dictionary.com website: http://dictionary.reference.com/browse/control

19. (previously presented) A fall arrest system according to claim 16, wherein:

said lower anchor point is deformable [capable of deforming or changing shape]. Since the anchor point is simply a removable strap, it is able to change its form/shape.

Art Unit: 3634

20. (previously presented) A fall arrest system according to claim 16,

wherein:

said cable has an upper end and a lower end, said upper anchor point is

operably disposed at said upper end, and said lower anchor point is operably

disposed at said lower end (as depicted in Fig 1).

21. (previously presented) A fall arrest system according to claim 16,

wherein: the fall arrest device is configured for movement along said cable.

Examiner notes that 'the fall arrest device' is not positively claimed in claim 16; therefor,

a fall arrest device of any kind just need be capable of moving along the cable and no

fall arrest device need be taught by Bell. Although, examiner adds that the fall arrest

device such as the harness of 34 is capable of performing the claimed action.

22. (previously presented) A fall arrest system according to claim 16,

further comprising: at least one cable guide. Since this claim is solely depend from

claim 16, the cable guide can be interpreted as element 26 (which is not needed for

claim 16, it is only used in claim 17) or the guide could be considered element 60 or the

lower D-ring, or etc.

23. (previously presented) A fall arrest system according to claim 16,

further comprising:

Art Unit: 3634

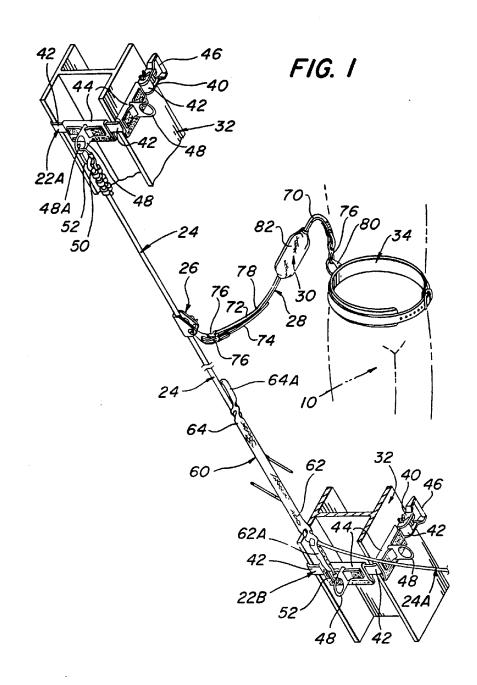
a third energy absorbing means (since this depends from claim 16 which has not yet claimed a second energy absorbing means, the lower D-ring 48 or element 26 could be considered the "third" energy absorbing means) coupled to and operably disposed adjacent said lower anchor point and connected to said cable (such as the D-ring; depicted in Fig. 1), wherein said third energy absorbing means also controls said shock load applied to said upper anchor point (by directing some of the force to the lower anchor point, the lower D-ring controls the load applied to to the top anchor point by lowering the force applied to it as a result) resulting from forces applied by the fall arrest device to said cable during said fall arrest event.

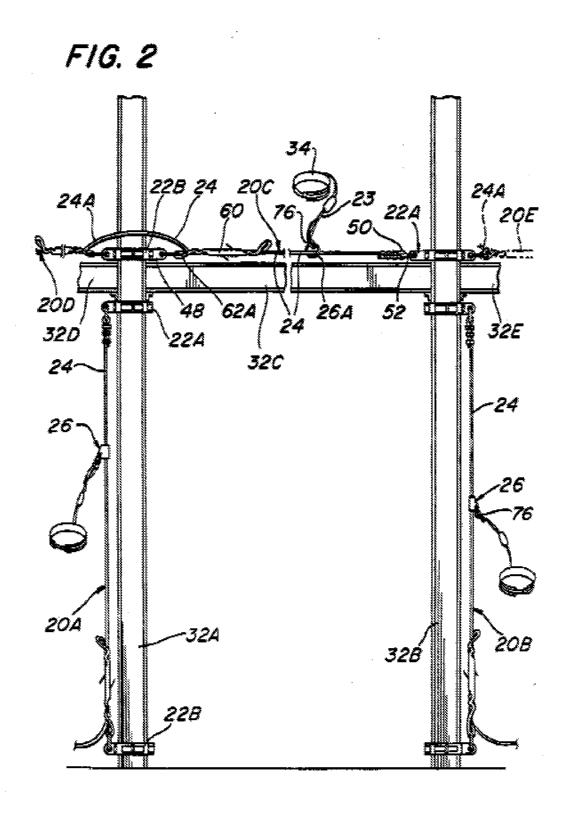
U.S. Patent

May 31, 1994

Sheet 1 of 2

5,316,102





Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 24, 25, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US 5316102) as applied to claim 16 discussed above, and further in view of Knight et al. (US 204581).

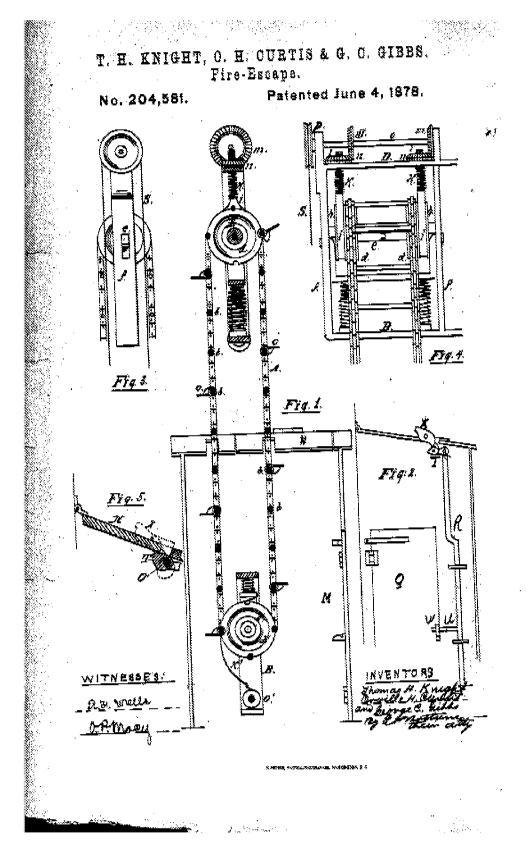
Regarding claims 24, 25, 27 and 29, all of the elements of the instant invention are discussed in detail above except providing the fall arrest system according to claim 16 or 28 with said first energy absorbing means as being resilient, or as being a spring, or as being capable of absorbing standing waves forces. Therefore, attention is directed toward Knight which teaches a similar safety user ascent/descent system (ladder escape device as depicted in Fig. 1) having a wire cable (A; Fig. 1) being pretensioned (via the springs; as depicted in Fig. 1) where the wire cable is anchored at its top via spring (K, Fig. 1) and anchored at its bottom via a spring (as depicted in Fig. 1).

All the claimed elements were known in the prior art as evidenced above, and one of ordinary skill in the art could have combined the elements as claimed, or substituted one known element for another, using known methods with no change in

Art Unit: 3634

their respective functions. Such a combination would have yielded predictable results to one of ordinary skill in the art at the time the invention was made, since the elements perform as expected and thus the results would be expected. Therefor, it would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted or combined the D-ring in the safety system of Bell with the springs connecting between the anchor points and the cable so as to provide the expected result of dampening the movement of the wire cable after any sudden stop or tug acted upon the wire cable of the ladder so as to inhibit a snapping/breaking of the wire cable or as well to dampen any descent acted upon to the user of the escape system.

The examiner further notes that the applicant has not provided specifics of the connection of the cable to the anchor point while providing pre-tension and so it does not seem to be of importance to the applicants instant invention.



Art Unit: 3634

Claims 26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US 5316102) as applied to claim 16 discussed above, and further in view of Small (US 5799760).

Regarding claims 26 and 30, all of the elements of the instant invention are discussed in detail above except providing the fall arrest system according to claim 16 or 28 with a plastically deformable element as the energy absorbing means. Therefore, attention is directed toward Small which teaches a similar fall arrest device (see Fig. 1 and 2) in which a cable/track (4) is anchored to an anchor point (at 11; Fig. 2) via a plastically deformable shock absorbing means (10).

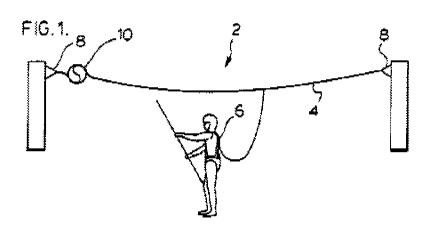
All the claimed elements were known in the prior art as evidenced above, and one of ordinary skill in the art could have combined the elements as claimed, or substituted one known element for another, using known methods with no change in their respective functions. Such a combination would have yielded predictable results to one of ordinary skill in the art at the time the invention was made, since the elements perform as expected and thus the results would be expected. Therefor, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the safety system of Bell with the plastically deformable element so as to provide the expected result of dampening the movement of the cable after any sudden stop or tug acted upon the cable (such as after a fall) so as to inhibit a snapping/breaking of the cable or as well to dampen any forces to the user due to a descent acted upon to the user after a fall.

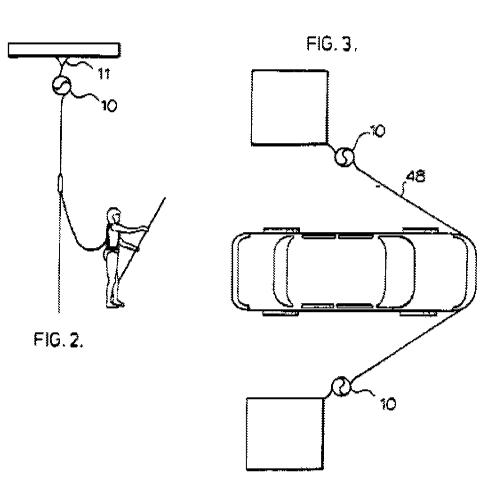
Application/Control Number: 10/595,612

Art Unit: 3634

U.S. Patent Sep. 1, 1998 Sheet 1 of 11 5,799,760

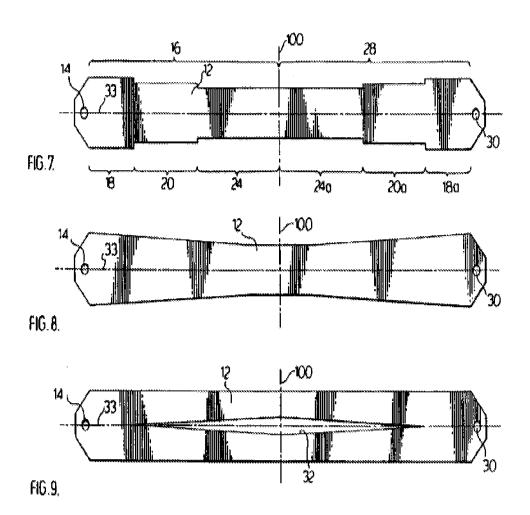
Page 16





Application/Control Number: 10/595,612

Art Unit: 3634



Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kleine et al. (US 3908791), and further in view of Small (US 5799760).

Regarding claim 31, Kleine teaches:

A fall arrest system comprising:

an upper anchor point (9; depicted in Fig. 1) secured in a fixed position;

Art Unit: 3634

a first energy absorbing means (the circular or button shaped element coupled on the opposing side of the anchor 9 and to the cable as seen in Fig. 1) coupled to said upper anchor point (as depicted in Fig. 1);

a lower anchor point secured (as depicted in Fig. 1) in a fixed position vertically below said upper anchor point and said first energy absorbing means; and

a cable (depicted in Fig. 1) extending vertically between said first energy absorbing means and said lower anchor point, wherein said upper anchor point and said lower anchor point exert opposed tensile forces (due to lower anchor point spring system 10) that are imparted on said cable extending between said first energy absorbing means and said lower anchor point such that said cable is pretensioned.

All of the elements of the instant invention are discussed in detail above except providing that said first energy absorbing means comprises a plastically deformable wound coil element configured to unwind [capable of unwinding] and extend in plastic deformation when deployed to absorb energy and control a shock load applied to said upper anchor point resulting from forces applied by the fall arrest device to said cable during a fall arrest event. Therefore, attention is directed toward Small which teaches a similar fall arrest device (see Fig. 1 and 2) in which a cable/track (4) is anchored to an anchor point (at 11; Fig. 2) via a plastically deformable shock absorbing means (10).

All the claimed elements were known in the prior art as evidenced above, and one of ordinary skill in the art could have combined the elements as claimed, or

substituted one known element for another, using known methods with no change in their respective functions. Such a combination would have yielded predictable results to one of ordinary skill in the art at the time the invention was made, since the elements perform as expected and thus the results would be expected. Therefor, it would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted or combined the anchor point and absorbing means of the safety system of Kleine with the anchor and plastically deformable system 10, 11 as taught by Small so as to provide the expected or predictable result of dampening the movement of the cable after any sudden stop or tug acted upon the cable (such as after a fall) so as to inhibit a snapping/breaking of the cable or as well to dampen any forces to the user due to a descent acted upon to the user after a fall.

Response to Arguments

Applicant's arguments filed 07/01/2010 with respect to claims 16, 17 and 19-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL CAHN whose telephone number is (571)270-

Art Unit: 3634

5616. The examiner can normally be reached on Monday through Friday (9 a. m. to 5 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL CAHN/ Examiner, Art Unit 3634

/Katherine W Mitchell/

Supervisory Patent Examiner, Art Unit 3634

Art Unit: 3634

Art Unit: 3634